

APPENDIX A

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FOR U.S. PATENT APPLICATION ENTITLED
"SYSTEM AND METHODS FOR REMOTELY ACCESSING
A SELECTED GROUP OF ITEMS OF INTEREST FROM A DATABASE"

[illegible]

A-1


```

If ItemNamesOn Then
    HideNames (NumberOfItems)
End If
picMain.Picture = CityPicture.Picture
cmdZoom.Caption = "U.S. Map"
HideItems
ShowAreas
ZoomLevel = "City"
picPort.Visible = False
picMain.Visible = True
Panel3D3.Visible = False
cmbCategories.Visible = False
cmbHeadings.Visible = False
cmdUpdate.Visible = False
Panel3D2.Visible = False
lblUSMapCaption.Visible = True
p3DItemInfo.Visible = False
p3DStreetAddLbl.Visible = False
p3DStreetAdd.Visible = False
p3DPhoneLbl.Visible = False
p3DPhone.Visible = False
p3DFaxLbl.Visible = False
p3DFaxNumber.Visible = False
'p3DDescLbl.Visible = False
'p3DDescription.Visible = False
picSponsorAd.Visible = False

curCategoryStr = ""
Panel3D9.Caption = "None"
Panel3D11.Caption = "None"
HelpShowNames.Checked = False
If AreaNamesOn Then
    ShowNames (NumberOfAreas)
End If
End If
End Sub

Sub FileExit_Click ()
End

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```
End Sub

Sub FilePrint_Click ()
    CMDialog1.CancelError = True
    On Error GoTo ErrHandler

    CMDialog1.Action = 5
    PrintForm

ErrHandler:
    Exit Sub

End Sub

Sub Form_Load ()

    ReDim Cities(1)

    'delivery only
    'Set DB = OpenDatabase("civix.mdb")

    'development only
    Set DB = OpenDatabase("t:\client\civix\proto\current\civix.mdb")
    Set GlobalSet = DB.CreateDynaset("SELECT * from Globals")

    PortXPix = GlobalSet!PortPixelsX
    PortYPix = GlobalSet!PortPixelsY
    CityXPix = GlobalSet!CityPixelsX
    CityYPix = GlobalSet!CityPixelsY
    PortXGrid = GlobalSet!Port Width
    PortYGrid = GlobalSet!Port Height
    MsgBox "XP: " & PortXPix & "YP: " & PortYPix & "XG: " & PortXGrid & "YG: " & PortYGrid

    Set CitySet = DB.CreateDynaset("CitySet")
    Panel3D7.Caption = "None"
    Panel3D9.Caption = "None"
    Panel3D11.Caption = "None"
    GetNumberOfCities
    GetCities
```

```

PixelsWide = Form1.picMain.Width + 10
PixelsHigh = Form1.picMain.Height + 15
ZoomLevel = "Country"
End Sub

```

```

Sub HelpShowNames_Click ()
Select Case ZoomLevel
Case "Country"
    If CityNamesOn Then
        HideNames (NumberOfCities)
        CityNamesOn = False
    Else
        ShowNames (NumberOfCities)
        CityNamesOn = True
    End If
Case "City"
    If AreaNamesOn Then
        HideNames (NumberOfAreas)
        AreaNamesOn = False
    Else
        ShowNames (NumberOfAreas)
        AreaNamesOn = True
    End If
Case "Location"
    If ItemNamesOn Then
        HideNames (NumberOfItems)
        ItemNamesOn = False
    Else
        ShowNames (NumberOfItems)
        ItemNamesOn = True
    End If

```

```

End Select
End Sub

```

```

Sub HideNames (NumNames)

```

```

    HelpShowNames.Checked = False
    Select Case ZoomLevel

```

```

Case "Country"
  For i = 1 To NumNames
    Unload LabelName(i)
  Next
Case "City"
  For i = 1 To NumNames
    Unload LabelName(i)
  Next
Case "Location"
  For i = 1 To NumNames
    Unload LabelNameb(i)
  Next
End Select
End Sub

Sub MoveToAreaMap (Index As Integer)
  If CityNamesOn = True Then
    HideNames (NumberOfCities)
  End If
  picCityPick(Index).BackColor = &H0&
  picUSA.Picture = picMain.Picture
  CityBmpName = GetCityBmpName(Index)

  'use the next line for delivery only
  'picMain.Picture = LoadPicture(CityBmpName)

  'use the next line during development only
  picMain.Picture = LoadPicture("t:\client\civix\proto\current\" & CityBmpName)

  HideCities
  CurrentCityKey = Cities(Index).Key
  CurrentCityIndex = Index
  Panel3D7.Caption = Cities(Index).Name
  Panel3D9.Caption = "None"
  Panel3D11.Caption = "None"
  lblUSMapCaption.Visible = True
  ShowAreas
  cmdZoom.Caption = "U.S. Map"
  lblPopCityArea.Visible = False

```

```

lblPopItem.Visible = False
ZoomLevel = "City"
If AreaNamesOn = True Then
    ShowNames (NumberOfAreas)
End If

End Sub

Sub MoveToLocationMap (Index As Integer)
    If AreaNamesOn = True Then
        HideNames (NumberOfAreas)
    End If
    lblPopCityArea.Visible = False
    lblPopItem.Visible = False
    picCityPick(Index).BackColor = &H0&
    Form1.MousePointer = 1
    CityPicture.Picture = picMain.Picture

    AreaBmpName = GetAreaBmpName(Index)

    'use the next line for delivery only
    'picMain.Picture = LoadPicture(AreaBmpName)

    'use the next line during development only
    picPort.Picture =
        LoadPicture("t:\client\civix\proto\current\" &
            AreaBmpName)

    CurrentLocation = Index
    HideAreas
    lblUSMapCaption.Visible = False
    p3DItemInfo.Visible = True
    p3DStreetAddLbl.Visible = True
    p3DPhoneLbl.Visible = True
    p3DFaxLbl.Visible = True
    'p3DDescLbl.Visible = True
    picSponsorAd.Visible = True

    p3DStreetAdd.Visible = True

```



```

p3DPhone.Visible = True
p3DFaxNumber.Visible = True
'p3DDescription.Visible = True

p3DStreetAdd.Caption = ""
p3DPhone.Caption = ""
p3DFaxNumber.Caption = ""
p3DDescription.Caption = ""
p3DItemInfo.Caption = "Item Data"

Panel3D2.Visible = True
Panel3D3.Visible = True
Panel3D5.Visible = True
cmdUpdate.Visible = True
picPort.Height = PortXPix
picPort.Width = PortXPix
picPort.Visible = True
picMain.Visible = False
cmbCategories.Visible = True
cmbCategories.Clear
cmbHeadings.Visible = True
cmbHeadings.Clear
GetHeadings
If NumberOfHeadings > 0 Then
    HeadingsSet.MoveFirst
    For i = 1 To NumberOfHeadings - 1
        cmbHeadings.AddItem HeadingsSet!Heading
        HeadingsSet.MoveNext
    Next
    cmbHeadings.AddItem HeadingsSet!Heading
    curHeadingStr = cmbHeadings.List(0)
    cmbHeadings.Text = cmbHeadings.List(0)
End If
GetHeadingIndex (curHeadingStr)
GetCategories (curHeadingIndex)
If NumberOfCategories > 0 Then
    CategorySet.MoveFirst
    For i = 1 To NumberOfCategories - 1
        cmbCategories.AddItem CategorySet!Category

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CategorySet.MoveNext
Next
cmbCategories.AddItem CategorySet!Category
cmbCategories.Text = cmbCategories.List(0)
CategorySet.MoveFirst
curCategoryStr = cmbCategories.Text
GetCategoryIndex (curCategoryStr)
ShowItems (curCategoryIndex)
End If
Panel3D7.Caption = Cities(CurrentCityIndex).Name
Panel3D9.Caption = Areas(CurrentLocation).Name
Panel3D11.Caption = curCategoryStr
cmdZoom.Caption = Cities(CurrentCityIndex).Name & " Map"
ZoomLevel = "Location"
If ItemNamesOn = True Then
    ShowNames (NumberOfItems)
End If

End Sub

Sub picAreaPick_Click (Index As Integer)
    MoveToLocationMap (Index)
End Sub

Sub picAreaPick_GotFocus (Index As Integer)
    picAreaPick(Index).BackColor = &H0&
    If Not AreaNamesOn Then
        lblPopCityArea.Caption = Areas(Index).Name

        topl = picAreaPick(Index).Top
        left1 = picAreaPick(Index).Left + 10
        If (left1 + lblPopCityArea.Width) > picMain.Width Then
            left1 = picMain.Width - lblPopCityArea.Width
            topl = topl - 20
        End If
        If topl < 0 Then
            topl = topl + 10
        End If
        lblPopCityArea.Top = topl
    End Sub

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    topl = topl - 30
End If
If topl < 0 Then
    topl = topl + 10
End If
lblPopCityArea.Top = topl
lblPopCityArea.Left = left1
lblPopCityArea.Visible = True
End If

End Sub

Sub picCityPick_KeyPress (Index As Integer, KeyAscii As Integer)
    If KeyAscii = 13 Or KeyAscii = 43 Then
        MoveToAreaMap (Index)
    End If
End Sub

Sub picCityPick_LostFocus (Index As Integer)
    picCityPick(Index).BackColor = &HFFFFFFF
End Sub

Sub picCityPick_MouseMove (Index As Integer, Button As Integer,
    Shift As Integer, X As Single, Y As
    Single)

    Form1.MousePointer = 10
    picCityPick(Index).SetFocus

End Sub

Sub picItemPick_GotFocus (Index As Integer)

    picItemPick(Index).BackColor = &H0&
    If Not ItemNamesOn Then
        lblPopItem.Caption = Items(Index).Name
    End If

    topl = picItemPick(Index).Top
```

```

left1 = picItemPick(Index).Left + 10
If (left1 + lblPopItem.Width) > picPort.Width Then
    left1 = picPort.Width - lblPopItem.Width
    top1 = top1 - 10
End If
If top1 < 0 Then
    top1 = top1 + 10
End If
lblPopItem.Top = top1
lblPopItem.Left = left1
lblPopItem.Visible = True
p3DStreetAdd.Caption = Items(Index).StreetAdd
p3DPhone.Caption = Items(Index).Phone
p3DFaxNumber.Caption = Items(Index).Fax
p3DDescription.Caption = Items(Index).Description
p3DItemInfo.Caption = "Item Data for " &
    Items(Index).Name
End If

End Sub

Sub picItemPick_LostFocus (Index As Integer)
    picItemPick(Index).BackColor = &HFFFFFFF
End Sub

Sub picItemPick_MouseMove (Index As Integer, Button As Integer,
    Shift As Integer, X As Single, Y As
    Single)
    Form1.MousePointer = 10
    picItemPick(Index).SetFocus
End Sub

Sub picMain_Click ()
    Beep
End Sub

```



```

top1 = picAreaPick(i).Top
left1 = picAreaPick(i).Left + 10
If top1 < 0 Then
    top1 = top1 + 4
End If
LabelName(i).Top = top1
LabelName(i).Left = left1
LabelName(i).Visible = True
Next
Case "Location"
For i = 1 To NumNames
    Load LabelNameb(i)
    LabelNameb(i).Caption = Items(i).Name
    top1 = picItemPick(i).Top
    left1 = picItemPick(i).Left + 10
    If top1 < 0 Then
        top1 = top1 + 4
    End If
    LabelNameb(i).Top = top1
    LabelNameb(i).Left = left1
    LabelNameb(i).Visible = True
Next
End Select
End Sub

```

```

Sub cmdAboutOK_Click ()
    frmAbout.Hide
End Sub

```

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of the software shall transfer to CIVIX
upon payment as arranged.

Global NumberOfCities As Long
Global NumberOfAreas As Long
Global NumberOfItems As Long
Global NumberOfCategories As Long
Global NumberOfHeadings As Long
Global ZoomLevel As String
Global CitySet As Dynaset
Global AreaSet As Dynaset
Global ItemSet As Dynaset
Global CategorySet As Dynaset
Global HeadingsSet As Dynaset
Global GlobalSet As Dynaset

Global CurrentCityIndex As Long
Global CurrentLocation As Long
Global CurrentCityKey As Long
Global curCategoryStr As String
Global curCategoryIndex As Integer
Global curHeadingStr As String
Global curHeadingIndex As Integer
Global Db As Database
Type CityRecord

Name As String
MapName As String
Key As Long
XCoord As Long
YCoord As Long
MaxXGrid As Long
MaxYGrid As Long
End Type
Type AreaRecord
Name As String

```

MapName As String
XCoord As Long
YCoord As Long

End Type

Type ItemRecord
    Name As String
    StreetAdd As String
    Key As Long
    Category As String
    XCoord As Long
    YCoord As Long
    Directions As String
    Description As String
    Phone As String
    Fax As String
    OwnerManager As String
    Title As String
    OtherAddress As String

End Type

Global Cities() As CityRecord
Global Areas() As AreaRecord
Global Items() As ItemRecord
Global CityBmpName As String
Global AreaBmpName As String
Global CityNamesOn As Integer
Global AreaNamesOn As Integer
Global ItemNamesOn As Integer
Global PortXPix As Integer
Global PortYPix As Integer
Global CityXPix As Integer
Global CityYPix As Integer
Global PortXGrid As Integer
Global PortYGrid As Integer

Sub DeleteCategories ()
    CategorySet.Close
    Form1.cmbCategories.Clear
End Sub

' bitmap for a city
' bitmap for a intersectional point

```


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```
Function GetAreaBmpName (Index As Integer)

    GetAreaBmpName = Areas(Index).MapName

End Function

Sub GetCategories (Key As Integer)

    Set CategorySet = Db.CreateDynaset("SELECT DISTINCTROW
Categories.Category, Categories.Index FROM Categories
WHERE (Categories.Heading = " & Key & ") WITH
OWNERACCESS OPTION; ")

    If Not CategorySet.EOF Then
        CategorySet.MoveLast
        NumberOfCategories = CategorySet.RecordCount
        CategorySet.MoveFirst
        MsgBox "Cats : " & NumberOfCategories
    Else
        MsgBox "No Items for this Heading!"
    End If

End Sub

Sub GetCategoryIndex (curCategoryStr As String)

    CategorySet.MoveFirst
    While Not CategorySet.EOF
        If CategorySet!Category = curCategoryStr Then
            curCategoryIndex = CategorySet!Index
        End If
    CategorySet.MoveNext
    Wend

End Sub

Sub GetCities ()
    Index = 1
    CitySet.MoveFirst
```

```

While Not CitySet.EOF
    Cities(Index).MapName = CitySet!FileName
    Cities(Index).Key = CitySet!CityKey
    Cities(Index).Name = CitySet!Name
    Cities(Index).XCoord = CitySet!XCoord
    Cities(Index).YCoord = CitySet!YCoord
    Cities(Index).MaxXGrid = CitySet!MaxXGrid
    Cities(Index).MaxYGrid = CitySet!MaxYGrid
    Load Form1.picCityPick(Index)
    Form1.picCityPick(Index).Top = Cities(Index).YCoord
    Form1.picCityPick(Index).Left = Cities(Index).XCoord
    Form1.picCityPick(Index).Visible = True
    CitySet.MoveNext
    Index = Index + 1
Wend

```

End Sub

Function GetCityBmpName (Index As Integer)

```

    GetCityBmpName = Cities(Index).MapName

```

End Function

Sub GetHeadingIndex (HeadingStr As String)

```

    HeadingsSet.MoveFirst
    While Not HeadingsSet.EOF
        If HeadingsSet!Heading = HeadingStr Then
            curHeadingIndex = HeadingsSet!Index
        End If
    HeadingsSet.MoveNext
Wend

```

End Sub

```

Sub GetHeadings ()
    Set HeadingsSet = Db.Createdynaset("SELECT DISTINCTROW
    CatHeadings.Heading, CatHeadings.Index FROM CatHeadings
    WITH OWNERACCESS OPTION;")
    If Not HeadingsSet.EOF Then
        HeadingsSet.MoveLast
        NumberOfHeadings = HeadingsSet.RecordCount
        HeadingsSet.MoveFirst
        curHeadingStr = HeadingsSet.IHeading
    Else
        MsgBox "No Headings!"
    End If
End Sub

Sub GetNumberOfCities ()
    If Not CitySet.EOF Then
        CitySet.MoveLast
        NumberOfCities = CitySet.RecordCount
    Else
        MsgBox "No Cities, cannot continue"
    End
    End If
    ReDim Cities(NumberOfCities)
End Sub

Sub HideAreas ()
    If NumberOfAreas > 0 Then
        For i = 1 To NumberOfAreas
            Form1.picAreaPick(i).Visible = False
        Next
    End If
End Sub

```

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End Sub

Sub HideCities ()

```
Form1.cmdZoom.Visible = True
Form1.Panel3D1.Visible = True
Form1.Panel3D4.Visible = False
For i = 1 To NumberOfCities
    Form1.picCityPick(i).Visible = False
Next
```

End Sub

Sub HideItems ()

```
For i = 1 To NumberOfItems
    Unload Form1.picItemPick(i)
Next
```

ReDim Items(1)

NumberOfItems = 0

End Sub

Sub ShowAreas ()

```
If NumberOfAreas > 0 Then
    For i = 1 To NumberOfAreas
        Unload Form1.picAreaPick(i)
    Next
    ReDim Areas(1)
    NumberOfAreas = 0
End If
```

```
Set AreaSet = Db.CreateDynaset("SELECT Locations.City,
Locations.Name, Maps.FileName, Locations.LocationKey,
GridCoord.XCoord, GridCoord.YCoord FROM Locations,
Maps, GridCoord, Locations LEFT JOIN Maps ON
Locations.MapName = Maps.Name, Locations LEFT JOIN
GridCoord ON Locations.GridLoc = GridCoord.GridKey
where city = " & CurrentCityKey & " WITH OWNERACCESS
OPTION;")
```

```

If Not AreaSet.EOF Then
    AreaSet.MoveLast
    NumberOfAreas = AreaSet.RecordCount
Else
    Exit Sub
End If

ReDim Areas(NumberOfAreas)

Index = 1
AreaSet.MoveFirst
While Not AreaSet.EOF
    Areas(Index).MapName = AreaSet.FileName
    Areas(Index).Name = AreaSet.Name
    Areas(Index).XCoord = AreaSet.XCoord
    Areas(Index).YCoord = AreaSet.YCoord
    Load Form1.picAreaPick(Index)

    'MsgBox "CityXPix: " & CityXPix & " CityYPix: " &
        "CityYPix

    'MsgBox "CityMaxX: " & Cities(CurrentCityIndex).MaxXGrid
        & " CityYMax: " &
        Cities(CurrentCityIndex).MaxYGrid

    'MsgBox "X: " & Areas(Index).XCoord & " Y: " &
        Areas(Index).YCoord

    Form1.picAreaPick(Index).Left = CityXPix *
        (Areas(Index).XCoord /
        Cities(CurrentCityIndex).MaxXGrid)

    Form1.picAreaPick(Index).Top = CityYPix *
        (Areas(Index).YCoord /
        Cities(CurrentCityIndex).MaxYGrid)

```

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```
Form1.picAreaPick(Index).Visible = True
AreaSet.MoveNext
Index = Index + 1
Wend
```

End Sub

Sub ShowCities ()

```
Form1.cmdZoom.Visible = False
Form1.Panel3D1.Visible = False
Form1.Panel3D4.Visible = True
For i = 1 To NumberOfCities
    Form1.picCityPick(i).Visible = True
    Form1.picCityPick(i).BackColor = &HFFFFFFF
Next
```

End Sub

Sub ShowItems (Key As Integer)

```
MaxX = Areas(CurrentLocation).XCoord + Int(.5 * PortXGrid)-1
Minx = Areas(CurrentLocation).XCoord - Int(.5 * PortXGrid)
MaxY = Areas(CurrentLocation).YCoord + Int(.5 * PortYGrid)-1
MinY = Areas(CurrentLocation).YCoord - Int(.5 * PortYGrid)
```

```
Set ItemSet = Db.CreateDynaset("SELECT DISTINCTROW
Items.Name, Items.Description, Items.Directions,
Items.ItemKey, GridCoord.XCoord, GridCoord.YCoord,
Items.StreetAdd, Items.Phone, Items.Fax,
Items.OwnerManager, Items.Title, Items.OtherAddress,
Categories.Index FROM Items, Categories, Cities,
GridCoord, CatsForItems, Cities LEFT JOIN Items ON
Cities.CityKey = Items.CityKey, Items LEFT JOIN
GridCoord ON Items.GridLoc = GridCoord.GridKey, Items
LEFT JOIN CatsForItems ON Items.ItemKey =
CatsForItems.ItemRef, CatsForItems LEFT JOIN Categories
ON CatsForItems.CatRef = Categories.Index WHERE
```

```
((Cities.CityKey = " & CurrentCityKey & ") And
(Categories.Index = " & Key & ") And (GridCoord.XCoord
<= " & MaxX & ") And (GridCoord.XCoord >= " & MinX & ")
And (GridCoord.YCoord <= " & MaxY & ") And
(GridCoord.YCoord >= " & MinY & ")) WITH OWNERACCESS
OPTION;")
```

```
If Not ItemSet.EOF Then
    ItemSet.MoveLast
    NumberOfItems = ItemSet.RecordCount
    'MsgBox " Items: " & NumberOfItems
Else
    'MsgBox "No Items for this Category!"
    Exit Sub
End If
```

```
ReDim Items(NumberOfItems)
```

```
Index = 1
ItemSet.MoveFirst
While Not ItemSet.EOF
    Items(Index).Key = ItemSet.ItemKey
    Items(Index).Name = ItemSet.Name
    Items(Index).Description = ItemSet.Description
    Items(Index).Directions = ItemSet.Directions
    Items(Index).XCoord = ItemSet.XCoord
    Items(Index).YCoord = ItemSet.YCoord
    Items(Index).StreetAdd = ItemSet.StreetAdd
    Items(Index).Phone = ItemSet.Phone
    Items(Index).Fax = ItemSet.Fax
    Items(Index).OwnerManager = ItemSet.OwnerManager
    Items(Index).Title = ItemSet.Title
    Items(Index).OtherAddress = ItemSet.OtherAddress
    Load Form1.picItemPick(Index)
```

```
Form1.picItemPick(Index).Top = Int((((Items(Index).YCoord
- Areas(CurrentLocation).YCoord) / PortYGrid) +
.5) * (PortYPix))
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```
Form1.picItemPick(Index).Left =  
    Int((((Items(Index).XCoord -  
        Areas(CurrentLocation).XCoord) / PortXGrid) + .5)  
        * (PortXPix))
```

```
'MsgBox " Top : " & Form1.picItemPick(Index).Top & "  
    Left: " & Form1.picItemPick(Index).Left
```

```
Form1.picItemPick(Index).Visible = True  
ItemSet.MoveNext  
Index = Index + 1  
Wend
```

End Sub

```
Sub Timer1_Timer ()  
    Form1.Show 0  
    Splash.Hide  
    Timer1.Enabled = False  
    Unload Splash
```

End Sub